

Remarks/Arguments:

This Amendment is provided to amend the specification, and amend claims 2, 5 and 7. No new matter has been added. Upon entry of this Amendment, claims 1-9 will be pending. Claims 1, 4 and 9 are independent.

Priority Document

The Examiner states that certified copies of the official priority document have not been received, but further notes that a bound document was received by the U.S. Patent Office on July 19, 2004 which was not able to be scanned. The Applicants note that the bound document was the priority document as submitted on July 19, 2004, and have an itemized postcard stamped by the receiving office at the U.S. Patent Office indicating the same.

However, as the first submission of the official priority document was not able to be scanned, the Applicants will obtain and submit another official priority document as requested by the Examiner.

Specification and Claims

The Applicants have amended the specification and claims 2, 5 and 7 to correct a number of typographical errors.

Rejections of the Claims under 35 U.S.C. 102

The Examiner has rejected claims 1-9 under 35 U.S.C. 102(e), as being anticipated by U.S. Patent No. 6,442,398 of Padovani et al. (hereinafter Padovani). Specifically, the Examiner points to Padovani as disclosing an apparatus for measuring the received power of a reverse link in a mobile communication system having an unchangeable power measuring block (UPMB) for measuring the received power of the reverse link, accumulating the measured received power, and outputting the accumulated received power as a received power value, a remover for compensating the received power value using a time constant if the received power value is for a silence period and a controller for providing a silence period

signal to the remover when the silence period starts, purportedly anticipating the invention as claimed by the Applicants in claim 1.

The Padovani reference describes a system and method wherein acknowledgment is made of the difficulty in measurement of a noise floor power level and which can affect the estimation of reverse link loading (see col. 5, lines 48-55 and lines 60-62). However, in the system and method described in the Padovani reference, a silence period is used in a number of techniques to, for example, find a gain adjustment value $TGA(0)$ over the silence period for use in a ratio, use an injected low energy deterministic signal to find a noise floor power level, or simply to make an observation to provide a reference for the noise floor level.

However, in each case, the silence period is provided to be sufficiently long enough to have a settling period. For example, in the first embodiment described in the Padovani reference where a silence period is used to find a gain adjustment value $TGA(0)$ over the silence period for use in a ratio, the silence period is controlled to be long enough to reach steady state operation (see col. 11, lines 53-59 and 126 of Fig. 5). Accordingly, there is no disclosure for a remover for compensating for errors in received power measurements, as the silence period is controlled to be long enough to reach steady state operation.

In regard to the second embodiment described in the Padovani reference, a silence period is used with an injected low energy deterministic signal that is low enough to not affect thermal noise (see 614 of Fig. 6) to find a noise floor power level. In this case, the silence period also includes a settling period T_w (see col. 13, lines 64-67 and 812 of Fig. 8). In regard to the third embodiment described in the Padovani reference, a silence period is used to simply to make an observation to provide a reference for the noise floor level. In this case, the silence period also includes a settling period T_w (see col. 16, lines 23-26 and 1004 of Fig. 10).

In each embodiment, the Padovani reference attempts to avoid the errors described by the Applicants in the measurement of thermal noise power over a silence period by creating and using settling periods. However, where such settling periods are short or cannot be provided at all, the measurement error as shown by the Applicants in Fig. 4 still occurs (see also Applicants' page 5, lines 28-32) and the systems and methods of the Padovani reference

do not disclose or suggest a solution to such measurement errors, such as the remover described by the Applicants for compensating for the errors in measured power. Accordingly, in contrast to the systems and methods of the Padovani reference which use settling periods only, the Applicants describe the use of a remover for compensating for the errors in measured received power.

The Examiner points to the AGC circuitry of the Padovani reference as disclosing such a remover. However, the AGC 622 of the Padovani reference describes an automatic gain circuit that is provided to regulate a filtered signal from the filter 620 to a pre-determined output power to be provided to the mixer 624 (see Fig. 6, and col. 13, lines 11-16). There is no disclosure in the Padovani reference of the AGC 622 compensating for the errors in measured received power. Further, the AGC of the Padovani reference is not disclosed as being controlled in a different manner during silence periods and non-silence periods.

That is, the remover described by the Applicants uses information about the silence period, for example, a signal received from the controller indicating the beginning of the silence period. This is used to inform the remover of the duration of the silence period, such that the remover can calculate the power measurement error over a silence period in the compensation described by the Applicants in claim 1. Still further, the controller described by the Applicants provides such a silence period signal to the remover to indicate the beginning of a silence period. However, there is no disclosure in the Padovani reference of a system and method for providing the AGC with a signal indicating the beginning of a silence period, nor of a controller for providing such a signal.

Accordingly, for these reasons, the Applicants assert that the Padovani reference does not disclose or reasonably suggest each element as claimed by the Applicants in independent claim 1. Accordingly, the Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. 102(e) of independent claim 1.

Regarding claims 2 and 3, the Examiner, in addition to the reasons stated above, further points to Padovani as disclosing a remover that processes the received power value for

the silence period, purportedly anticipating the invention as claimed by the Applicants in claim 2 and disclosing the bypass of the received power value received from the UPMB if a silence period signal is not received, purportedly anticipating the invention as claimed by the Applicants in claim 3.

However, for the reasons stated above, the Applicants assert that the Padovani reference does not disclose or reasonably suggest each element as claimed by the Applicants in independent claim 1, from which claims 2 and 3 depend. Accordingly, the Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. 102(e) of dependent claims 2 and 3 for the same reasons.

Regarding claim 4, the Examiner points to Padovani as disclosing an apparatus for measuring the received power of a reverse link in a mobile communication system having an unchangeable power measuring block (UPMB) for measuring the received power of the reverse link, accumulating the measured received power, and outputting the accumulated received power as a received power value, a remover for compensating the received power value using a time constant if the received power value is for a silence period, a bypass line for outputting an input power value, a switch for switching the received power value received from the UPMB between the remover and the bypass line according to a switching control signal and a controller for generating the switch control signal by which the switch is connected to the remover for a silence period and to the bypass line for a non-silence period, purportedly anticipating the invention as claimed by the Applicants in claim 4.

However, in addition to the reasons noted above in regard to independent claim 1, the Applicants assert that the Padovani reference does not disclose or reasonably suggest a bypass line or a switch for switching to the bypass line for bypassing the remover. As shown in Padovani Fig. 6, there is no disclosure of a switch or bypass line to bypass the AGC 622, which the Examiner states discloses a remover, in response to a control signal as described by the Applicants in claim 4. Further, as there is no bypass line or switch, there is no disclosure in the Padovani reference of a controller for generating a switch control in response to silence and non-silence periods.

Further, as noted above, the Padovani reference describes a system and method which uses a silence period provided to be sufficiently long enough to have a settling period. The Padovani reference attempts to avoid the errors described by the Applicants in the measurement of thermal noise power over a silence period by creating and using settling periods. However, where such settling periods are short or cannot be provided at all, the measurement error as shown by the Applicants in Fig. 4 still occurs (see also Applicants page 5, lines 28-32) and the systems and methods of the Padovani reference do not disclose or suggest a solution to such measurement errors, such as the remover described by the Applicants for compensating for the errors in measured power. Accordingly, in contrast to the systems and methods of the Padovani reference which use settling periods only, the Applicants describe the use of a remover for compensating for the errors in measured received power.

The Examiner points to the AGC circuitry of the Padovani reference as disclosing such a remover. However, as noted above, the AGC 622 of the Padovani reference describes an automatic gain circuit that is provided to regulate a filtered signal from the filter 620 to a pre-determined output power to be provided to the mixer 624. There is no disclosure in the Padovani reference of the AGC compensating for the errors in measured received power.

Accordingly, for these reasons, the Applicants assert that the Padovani reference does not disclose or reasonably suggest each element as claimed by the Applicants in independent claim 4. Accordingly, the Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. 102(e) of independent claim 4.

Regarding claim 5, the Examiner, in addition to the reasons stated above, further points to Padovani as disclosing a remover that processes the received power value, purportedly anticipating the invention as claimed by the Applicants in claim 5.

However, for the reasons stated above, the Applicants assert that the Padovani reference does not disclose or reasonably suggest each element as claimed by the Applicants in independent claim 4, from which claim 5 depends. Accordingly, the Applicants

respectfully request the withdrawal of the rejection under 35 U.S.C. 102(e) of dependent claim 5 for the same reasons.

Regarding claim 6, the Examiner points to Padovani as disclosing method for measuring the received power of a reverse link in a mobile communication system by measuring the received power of the reverse link, accumulating the measured received power, and outputting the accumulated received power as a received power value, compensating the received power value using a time constant if the received power value is for a silence period and outputting the compensated received power value as a thermal noise power value for the silence period and calculating a riser over thermal (ROT) power value using the received power value measured for a non-silence period and the thermal noise power value of the silence period, purportedly anticipating the invention as claimed by the Applicants in claim 6.

However, as noted above, the Padovani reference describes a method in which a silence period is used and which is sufficiently long enough to have a settling period. The Padovani reference attempts to avoid the errors described by the Applicants in the measurement of thermal noise power over a silence period by creating and using settling periods. However, in contrast to the systems and methods of the Padovani reference which use settling periods only to avoid error in measurements over silence periods, the Applicants describe a method for compensating for the errors in the measured received power.

The Examiner points to the AGC circuitry of the Padovani reference as disclosing such a step. However, as noted above, the AGC 622 of the Padovani reference describes an automatic gain circuit that is provided to regulate a filtered signal from the filter 620 to a pre-determined output power to be provided to the mixer 624. There is no disclosure in the Padovani reference of the AGC compensating for the errors in measured received power.

Accordingly, for these reasons, the Applicants assert that the Padovani reference does not disclose or reasonably suggest each element as claimed by the Applicants in independent claim 6. Accordingly, the Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. 102(e) of independent claim 6.

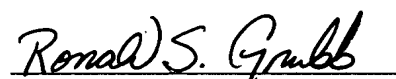
Regarding claims 7, 8 and 9, the Examiner, in addition to the reasons stated above, further points to Padovani as disclosing a compensation method, purportedly anticipating the invention as claimed by the Applicants in claim 7, disclosing a step for controlling the load of the reverse link based on the ROT power value, purportedly anticipating the invention as claimed by the Applicants in claim 8, and disclosing a step for bypassing the step of compensating the received power using a time constant during a non-silence period, purportedly anticipating the invention as claimed by the Applicants in claim 9.

However, for the reasons stated above, the Applicants assert that the Padovani reference does not disclose or reasonably suggest each element as claimed by the Applicants in independent claim 6, from which claims 7, 8 and 9 depend. Accordingly, the Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. 102(e) of dependent claims 7, 8 and 9 for the same reasons.

Conclusion

In view of the above, it is believed that the application is in condition for allowance and notice to this effect is respectfully requested. Should the Examiner have any questions, the Examiner is invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,


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